Infrastructure Management, Covering Your Assets, and The Great GASB 34

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In this article I would like to give a brief introduction to Asset Management Systems (AMS) and GASB34, but first we will begin with Infrastructure Management (IMS). I have been a proponent of Infrastructure Management for a number of years now, and I still fail to come up with a succinct definition to truly describe what an IMS really is. These types of systems seem to be in a constant state of dynamic evolution.

The best I can come up with for a one-line description is this:

Infrastructure Management is: A holistic approach to managing complex infrastructure systems in order to maximize their efficiencies and resources for the benefit of all users.

I know that it sounds as clear as mud, but I think it is a good starting point.

Let's start with the word holistic: The American Heritage Dictionary defines it as emphasizing the importance of the whole and the interdependence of its parts. It is a bird's eye view of how your organization functions as a whole, and how it resides and interacts in an environment of other diverse organizations.

Let us take your roadway system, for example. Your PMS (Pavement Management System) is one small part of the whole transportation network. Its function is to preserve your roadway network at some given level of performance. It identifies when a roadway should have maintenance and rehabilitation performed on it, and at what point in time that it is the most cost effective. Using a Management System like Pavement Management, Maintenance Management, Safety Management, or Bridge Management is a proven cost effective way to manage your resources.

One of the problems of these stovepipe management systems is lack of integration and communication.

Back to our example of a PMS, let's say you spend a lot of time, effort, and money, to inventory, evaluate and analyze a section of pavement. The crystal ball algorithms say today is the most cost effective day to spend your limited resources on preserving this piece of roadway. So you hire someone do the rehabilitation (we won't talk about the ridiculous sum of money that you had to pay them in the process), and now the work is completed. Ahhh, so now you sit back in your easy chair smugly congratulating yourself on what a fine job you did managing your pavement. As you sit there sipping your mochacino and glancing at the nightly newspaper, you realize that the cover story is about a new 48 inch sewer line that is going to run right down beneath the middle of your still steaming asphalt. Sitting there still in shock, mochacino all over the carpet, you murmur to yourself there must be a better way! The good news is that there IS a better way! That better way is Infrastructure Management.

The problem with implementing Infrastructure Management is that it is more than just buying some fancy new software program. It is a new way of doing business.

Keep in mind our definition of holistic: emphasizing the importance of the whole and the interdependence of parts. It is looking outside our box and seeing our role in the whole of the organization and our interdependence on other members. It is also more than somebodys nice little bell curve or algorithm. It goes to the heart of why we do what we do, for whom we do it, and how we can do it better. A big part of Infrastructure Management is simply good old fashioned communication.

In the scenario of the Pavement Manager with the sewer line running down the center of the freshly paved road, simply working with the sewer department could has saved much effort and money. Do you need a big fancy database system or GIS to do that, No. Simply sharing your six-month, one year and/or five year plans with each other would have worked. Databases and GIS's have their place in the management process, but they are only a tool to use and not a substitute for Good Management Practices. Many of our databases and GIS's were built around the stovepipe system that they serve. In order to be able to analyze and evaluate information, and to make informed decisions regarding the whole infrastructure, these systems need to be integrated with one another.

That is easy to say with the tap of the keyboard, but much harder to actually accomplish. In the last issue of the T2 Bulletin there was an article covering the Geospatial Framework Committee. This is an interagency group of people trying to reach a consensus on a common framework for GIS users to share data across governmental boundaries. It is projects like these that will help make Infrastructure Management more of a reality. Their website is: http://www.wa.gov/GIC/Framework/cadastre/.

The reason for discussing projects like these and concepts like Infrastructure Management and Asset Management is that many of the agencies reading this article are either contemplating or implementing some form of Infrastructure Management. Those agencies who aren't, will need to start thinking about it, and will need a direction to move in. Before we move on to talk about Asset Management, I need to mention one of the motivating factors driving the need to move to Infrastructure / Asset Management besides its own merits of making good business sense.

We need to talk about GASB 34. The following is some information from their web site.

First, what is GASB 34? The GASB stands for Governmental Accounting Standards Board. The mission of the Governmental Accounting Standards Board is to establish and improve standards of state and local governmental accounting and financial reporting that will result in useful information for users of financial reports, and to guide and educate the public, including issuers, auditors, and users of those financial reports.

http://www.rutgers.edu/Accounting/raw/gasb/index.html

The number represents the statement number assigned by the Board, Statement Number 34. It is titled, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments.

http://www.rutgers.edu/Accounting/raw/gasb/repmodel/index.html

This Statement establishes financial reporting standards for state and local governments, including states, cities, towns, villages, and special-purpose governments such as school districts and public utilities.

This Statement establishes new financial reporting requirements for state and local governments throughout the United States.

Important Aspects of the Government-wide Financial Statements

Governments should report all capital assets, including infrastructure assets, in the government-wide statement of net assets and generally should report depreciation expense in the statement of activities. Infrastructure assets that are part of a network or subsystem of a network are not required to be depreciated as long as the government manages those assets using an asset management system that has certain characteristics and the government can document that the assets are being preserved approximately at (or above) a condition level established and disclosed by the government.

Effective Date and Transition

The requirements of this Statement are effective in three phases based on a government's total annual revenues in the first fiscal year ending after June 15, 1999. Governments with total annual revenues (excluding extraordinary items) of \$100 million or more (phase 1) should apply this Statement for periods beginning after June 15, 2001. Governments with at least \$10 million but less than \$100 million in revenues (phase 2) should apply this Statement for periods beginning after June 15, 2002. Governments with less than \$10 million in revenues (phase 3) should apply this Statement for periods beginning after June 15, 2003. Earlier application is encouraged. Governments that elect early implementation of this Statement for periods beginning before June 15, 2000, should also implement GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, at the same time. If a primary government chooses early implementation of this Statement, all of its component units also should implement this standard early to provide the financial information required for the government-wide financial statements.

Prospective reporting of general infrastructure assets is required at the effective dates of this Statement. Retroactive reporting of all major general governmental infrastructure assets is encouraged at that date. For phase 1 and phase 2 governments, retroactive reporting is required four years after the effective date on the basic provisions for all major general infrastructure assets that were acquired or significantly reconstructed, or that received significant improvements, in fiscal years ending after June 30, 1980. Phase 3 governments are encouraged to report infrastructure retroactively, but may elect to report general infrastructure prospectively only.

To make a long story short, all governmental agencies will need to take a closer look at how they manage the infrastructure with which they have been entrusted, and how they communicate the results to the public. I am currently wading through reams of information on the topic and there will be more in depth information available in the next issue of the T2 Bulletin. This article is only a brief introduction to the topic and to relate to GASB 34.

So that leads us to our final topic. Asset Management. What is it and how does it relate to Infrastructure Management?

If Infrastructure Management is A holistic approach to managing complex infrastructure systems in order to maximize their efficiencies and resources for the benefit of all users, then Asset Management builds on the framework of Infrastructure Management and melds into it the accounting aspects for management of the capital investments.

Some of the questions that Asset Management asks are:

What is it, where is it located and what is it worth?

Asset Management begins with an inventory of all fixed assets that make up the infrastructure at a certain level of capital investment. For this example we will use things worth over \$25,000 i.e., roadways, bridges, illumination, traffic signals, waste water piping systems. We ask ourselves these questions:

What has it cost both initially and historically to provide for this component?

What will it cost to maintain it at some level of performance into the future?

Is it sufficient to meet the need for which it was intended?

What is it life span and depreciation rate?

I hope you can begin to see the difference between Asset and Infrastructure Management. It will become more apparent as we look more in depth in upcoming T2 Bulletin articles.

I leave you with a couple of good URL's for Asset Management. The first one is PublicWorks.com:

http://www.publicworks.com/content/homepage

If you type Asset Management into their search engine, you will find a lot of resources relating to all aspects of the topic from a public works perspective.

The second is the Office of Asset Management in FHWA.

http://www.fhwa.dot.gov/infrastructure/asstmgmt/index.htm

FHWA has a very good little publication called The Asset Management Primer. It can be downloaded in a .PDF format from the resources section of their site.

I hope this introduction has fueled your curiosity for investigation into some of the challenges that lay ahead.

Questions or comments:

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